USER'S MANUAL

Integrated Agricultural Market Information System

(IAMIS)

By

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General Information
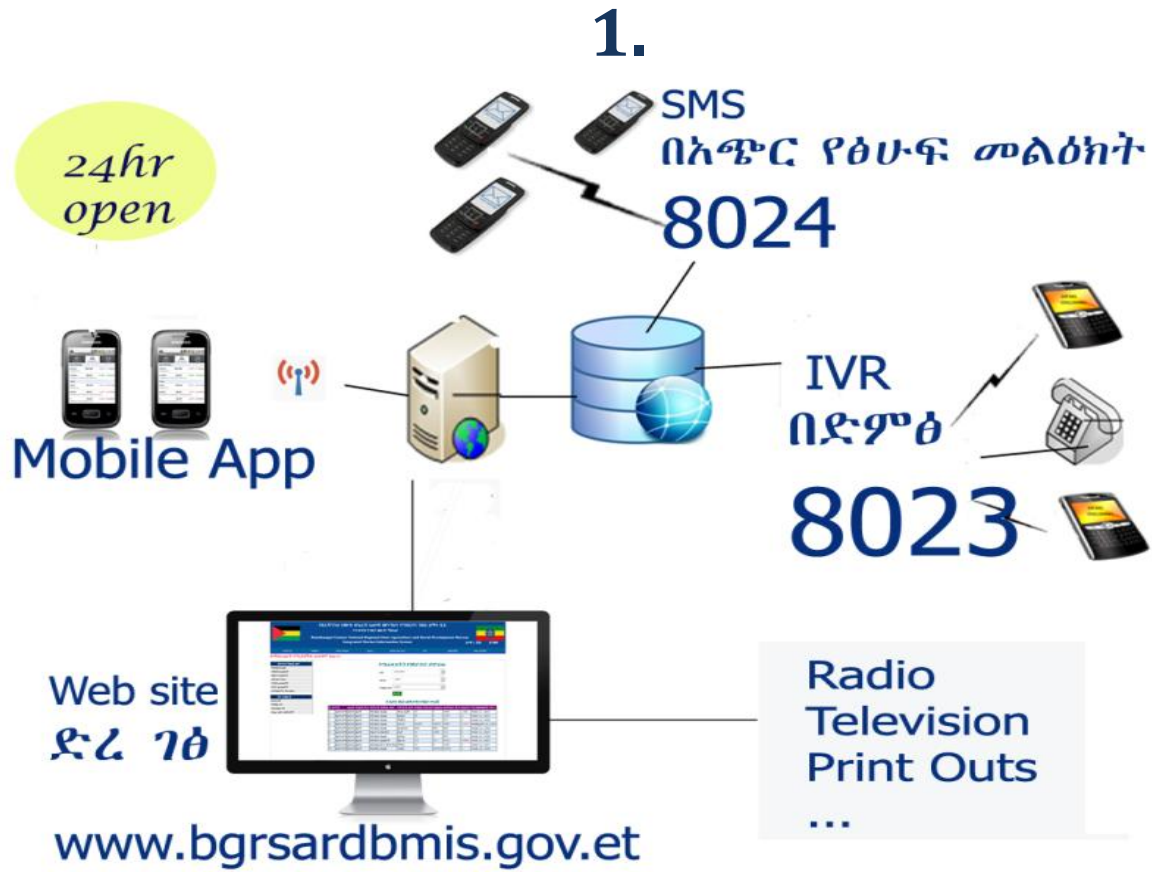
System Overview

IAMIS: is an Integrated Market Information System which is designed and developed by ***ABY Information Systems Solutions*** for the ***Bureau of Agriculture and Rural Development Benshangul Gumuz Regional State*** with the sponsorship of ***Canadian Hunger Foundation (CHF)*** to provide timely and accurate market information for the farmers in remote area, consumers, merchants and other stakeholders who seek the information for different purpose.

It is designed by considering the educational level and technology infrastructure in the region. So that people who lives in different woredas and kebeles can get the info in their own local language via their own ordinary mobile phones. The IAMIS System works with the **five** major languages of the region this includes: ***Amharic, Afan Orommo, Gumuz, Rutana and shinasha*** languages.
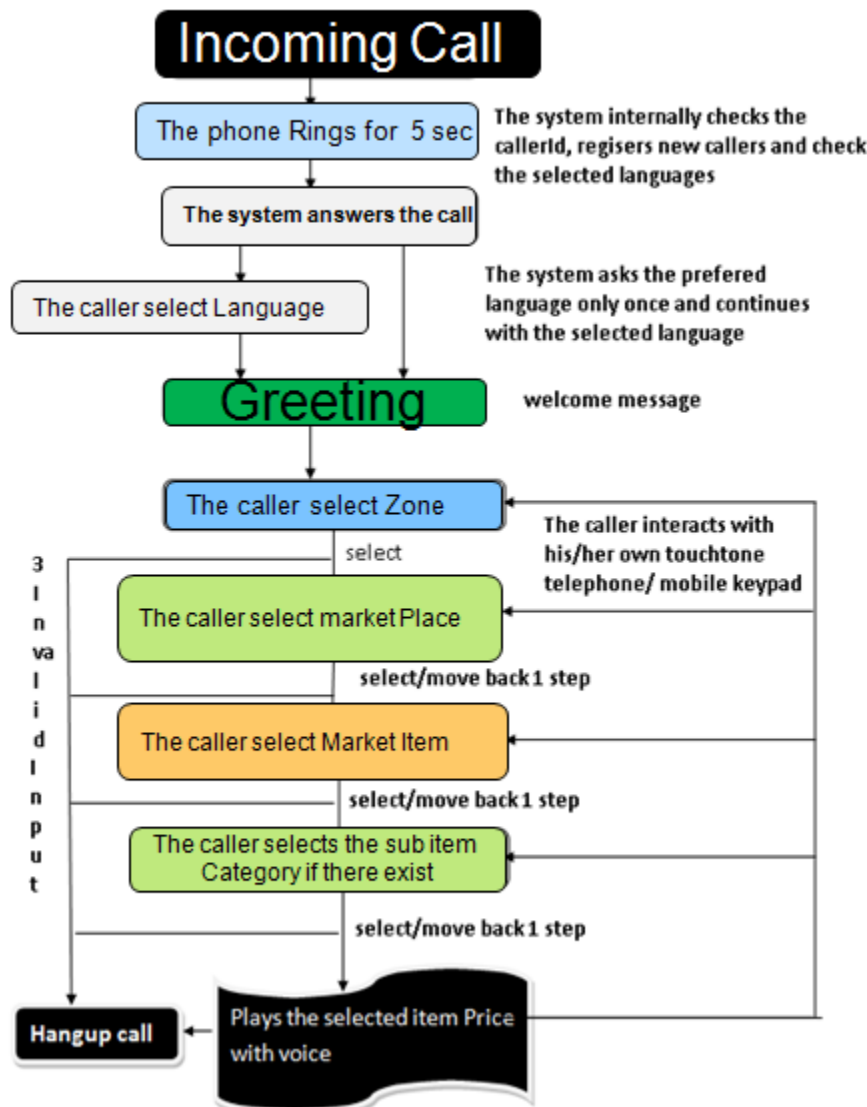
What makes the IAMIS special are:
- ➢ It is user friendly and easy to use
- ➢ It is dynamic and interactive system that delivers timely market information **24/7** without human intervention.
- ➢ It is accessible throughout the country using ordinary mobile phones via ***Voice (interactive Voice Response call to 8023), SMS (send and receive to and from 8024), Android app and dynamic website.***

The Major Components of IAMIS

1.

1. How to use the IVR subsystem to get Market Information

The user simply make a call to the four digit short **8023**, then the IVR (Interactive Voice Response) system answers the call and the user will be guided by the prerecorded voice menu as follows:

1. The system plays the "**Welcome**" message for the caller

2. The user prompted to select languages

   ➢ **Press 1 for Amharic**

   ➢ **Press 2 for Affan Oromo**

   ➢ **Press 3 for Gumuzigna**

   ➢ **Press 4 for Shinashigna**

   ➢ **Press 5 for Rutangna**

3. The user prompted to select the Zone

   ➢ **Press 1 for Assosa Zone**

   ➢ **Press 2 for Metekel Zone**

   ➢ **Press 3 for Kamahi Zone**

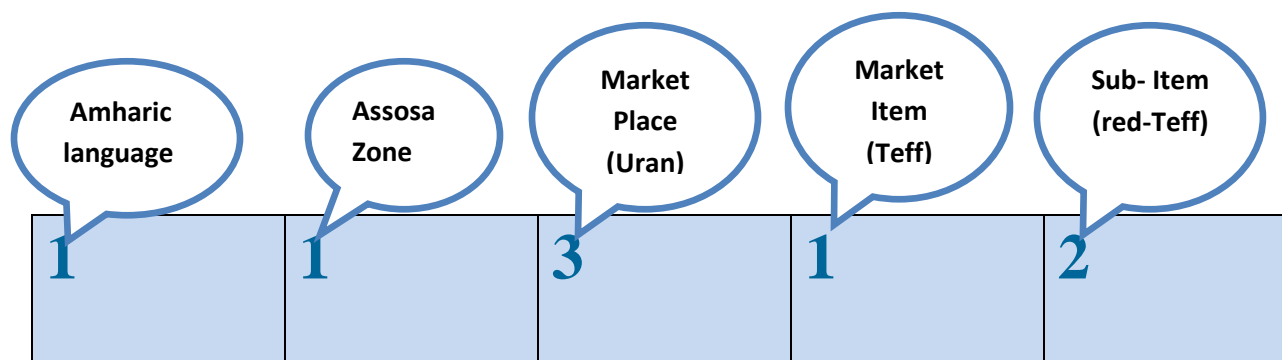4. The user prompted to select the Market place in the selected Zone above

   For Example: **(Under Assosa Zone)**

   ➢ **Press 1 for Assosa market place under Assosa Zone**

   ➢ **Press 2 for Mengie market place**

   ➢ **Press 3 for Uran market place**

   ➢ **………………**

5. The user prompted to select Market Item under the selected Market place

   ➢ **Press 1 for Teff**

   ➢ **Press 2 for Wheat**

   ➢ **Press 3 for Maize**

   ➢ **………………**

6. The user prompted to select sub Market Item if exist

   ➢ **Press 1 for white Teff**

   ➢ **Press 2 for red teff**

   ➢ **Press 3 for Mixed teff**

7. The user hears the price of the selected item in the selected language.

8. **Prompt the caller to repeat the played voice by pressing "0"**

9. **Move back to the previous menu by pressing "*"**

10. At the end the system plays the "**Thank you**" message for the caller

Scenario based on the above Voice flow Description

If I need to know the price of "*red teff*" in "*Assosa Zone*" and in "*Uran Market Place*" in "*Amharic*" language via Voice (IVR system) I will make a call to *8023* then listen the voice menu and based on the voice guide played in the consecutive steps I will press the following numbers on my mobile keypad.

Amharic language	Assosa Zone	Market Place (Uran)	Market Item (Teff)	Sub- Item (red-Teff)
1	**1**	**3**	**1**	**2**

From the above scenario after calling to the short code number "**8023**" by pressing "*11312*" on our mobile keypad we can hear directly the price of *Red teff* in *Assosa Zone, Uran Market place in Amharic language* without listening to the long menu.

Generally how to use the Short code
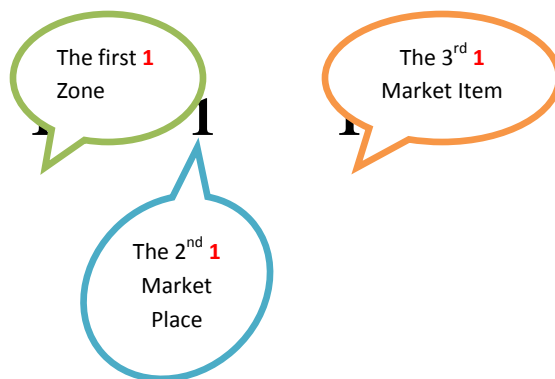
After we selected the language

Case 1. If the market Item doesn't have sub-item (kind or variety)

The number of Codes will be "ABC" where:

> ❖ *A ----- Represents Zone*
>
> ❖ *B ----Represents Market place*
>
> ❖ *C ----Represents Market Item*

For example :- ** In order to know the price of **Maize in **Assosa Zone** and in **Assosa Market place**.
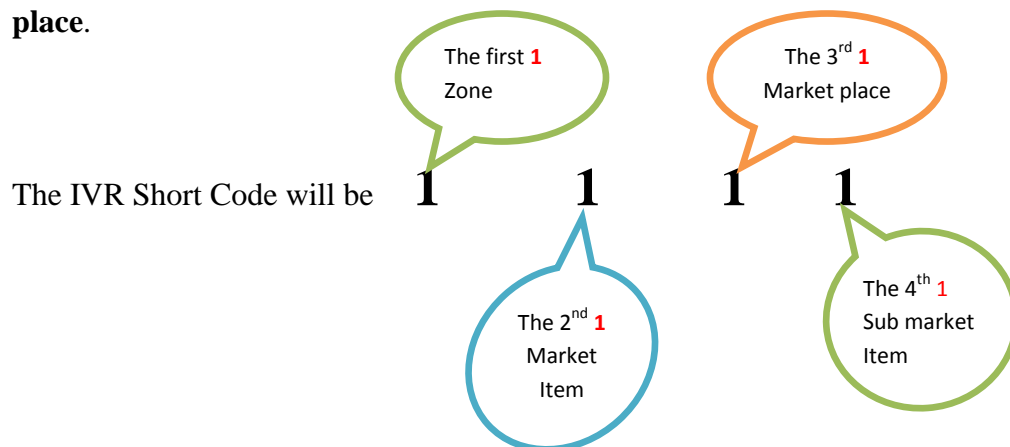
The IVR Short Code will be

> The first **1** Zone
>
> The 3rd **1** Market Item
>
> The 2nd **1** Market Place

Case 2. If the market Item have sub-item (kind or variety)

The number of Codes will be "ABC" where:

> ❖ *A ----- Represents Zone*
>
> ❖ *B ----Represents Market place*
>
> ❖ *C ----Represents Market Item*
>
> ❖ *D -----Represents Sub market item*

For example :- In order to know the price of **Red teff** in **Assosa Zone** and in **Assosa Market place**.

The IVR Short Code will be   **1   1   1   1**

> The first **1** Zone

> The 2nd **1** Market Item

> The 3rd **1** Market place
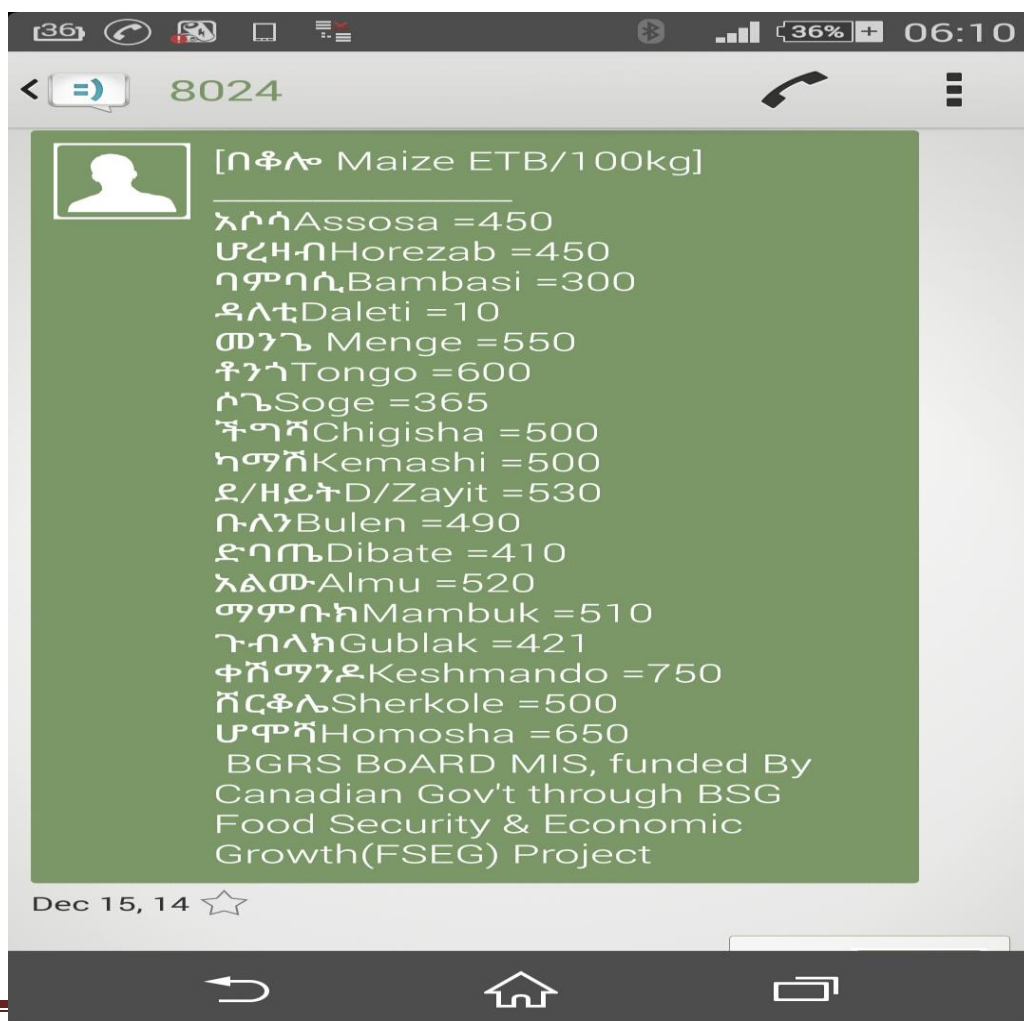
> The 4th **1** Sub market Item

Handling of Errors When the User Press wrong Short Code

1. When the user press a wrong Code on their mobile keypad the system plays a message called "***Please try again! You pressed invalid Code***"

2. If the user makes a mistake more than three times in one call the system plays the message called "***Thanks for Calling***" and then the call will be hang-up.

3. If the user tries to know the price of unregistered Item (or if the item is registered but its price is not entered to the system), the system will play a message called " ***currently the item is not available for market***"

2. How to use the SMS subsystem to get Market Information

To get Market information via SMS users can simply send commodity name like (for example *Maize, Sorghum, Teff, Garlic, Onion* etc) to *8024*. It is the Short code number for SMS service for this System and in response they will get an SMS message that contains the price of that commodity in different market places. The following screen shoot shows the replay message from the SMS subsystem after the user sends a message by typing "*Maize*" to *8024*.

Note: The received message is both in **Amharic** and in **English languages** in order to fill the English language literacy Gap of the users.
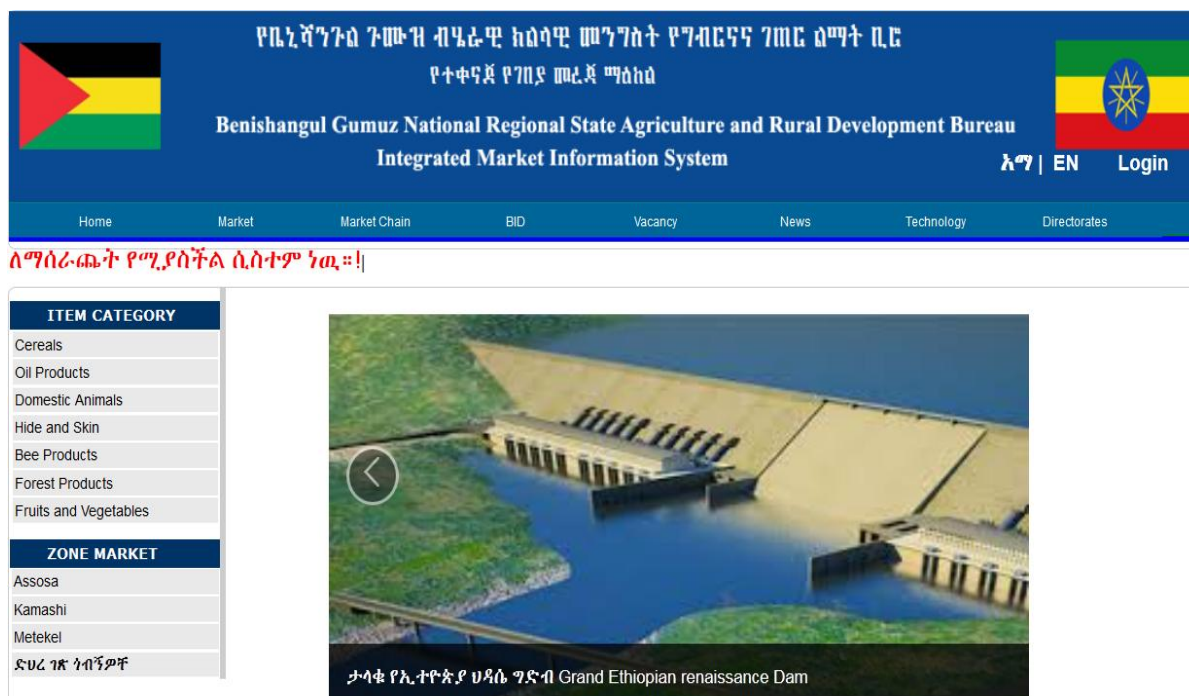
3. How to use the Web Application subsystem to get Market Information

If the users have access of Internet service and basic computer and internet usage skills, he/she can get the whole market information via the web application subsystems of the IAMIS system easily.

The steps to do this are:

1. The user opens a browser on their computer or on their mobile phones (if his /her mobile phone has Internet connection)
2. Type the URL of the IAMIS website on the browser which is "***www.bgrsardbmis.gov.et***", then press enter.
3. Then the page will be displayed for the user and then the user can click on the different menus and sub menus (may be on vertical or horizontal) and he/she can see the information he/she wants.

    The following Screen Shoot shows the Welcome page of the IAMIS Website.

The Web application supports two main languages. These are Amharic and English.

Steps:

1. To Switch From English to Amharic just click on

2. To Switch from Amharic to English just click on

The user can view market information by two categories, these are:
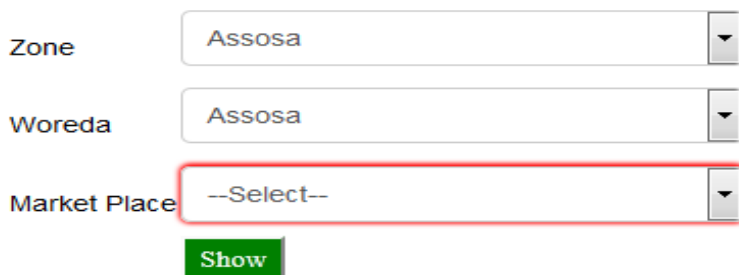
1. View by Market Place and
2. View by Market Item

View by Market Place

Steps:

The user Select the following form parameters

1. **Zone Name:-** We have to select zone name from zone option
2. **Woreda Name:** - the system display the list of Woreda name under the selected Zone Name
3. **Place Name:-** we have to select market place from the selected woredas

Please select form parameters

Zone	Assosa
Woreda	Assosa
Market Place	--Select--

Show

4. Click on the "Show" Button , and the following image will be displayed

The screen shoot below shows the price of different market items (agricultural products) in the Assosa Zone, Assosa Woreda and Assosa Market palace.

No	Zone	Woreda	Market Place	Item Category	Item Name	Available	Sold	Avg Price	Difference	Market Date
1	Assosa	Assosa	Assosa	Cereals	White Teff	35	35	1400	+1400	04/12/2014
2	Assosa	Assosa	Assosa	Cereals	Red Teff	10	5	1200	+1100	05/12/2014
3	Assosa	Assosa	Assosa	Cereals	Mixed Teff	0	0	1320	+1320	05/12/2014
4	Assosa	Assosa	Assosa	Cereals	Maize	180	180	450	--670	04/12/2014
5	Assosa	Assosa	Assosa	Cereals	Sorghum	70	70	550	+100	04/12/2014
6	Assosa	Assosa	Assosa	Cereals	finger Millet	25	25	600	--1300	04/12/2014
7	Assosa	Assosa	Assosa	Cereals	Soya Bean	15	15	600	--66	04/12/2014
8	Assosa	Assosa	Assosa	Domestic Animals	Oxe	70	50	8500	-0	04/12/2014
9	Assosa	Assosa	Assosa	Domestic Animals	Hen	400	380	100	--21	04/12/2014
10	Assosa	Assosa	Assosa	Cereals	Wheat	20	4	820	-0	22/08/2014
11	Assosa	Assosa	Assosa	Oil Products	Sesame	35	35	2600	--1610	04/12/2014
12	Assosa	Assosa	Assosa	Oil Products	Niger	5	5	1700	+1700	04/12/2014
13	Assosa	Assosa	Assosa	Oil Products	Ground Nut Yetefelefle	0	0	0	-0	03/12/2014
14	Assosa	Assosa	Assosa	Oil Products	Ground Nut Yaltefelefele	25	25	1200	+1200	04/12/2014
15	Assosa	Assosa	Assosa	Fruits and Vegetables	Baro Onion	90	90	1500	-0	04/12/2014
16	Assosa	Assosa	Assosa	Fruits and Vegetables	Garlic	35	35	6500	-0	04/12/2014
17	Assosa	Assosa	Assosa	Fruits and Vegetables	Potato	70	70	600	-0	04/12/2014
18	Assosa	Assosa	Assosa	Fruits and Vegetables	Mango	12	8	1200	-0	25/11/2014
19	Assosa	Assosa	Assosa	Domestic Animals	Caw	80	45	5000	-0	04/12/2014
20	Assosa	Assosa	Assosa	Domestic Animals	Sheep	100	80	1000	-0	04/12/2014

View by Market Item

Objective: Display Market Information on a specific market Item in different Market places

For example. To know the price of sesame in different market places

Steps:

1. Select the Item name from the item selection list (in this case we select sesame)
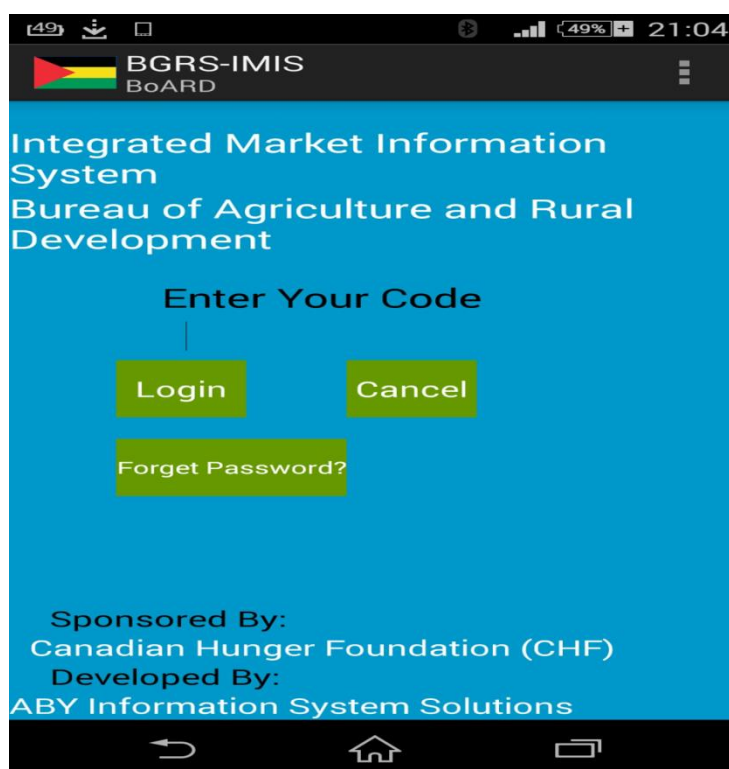
Please Select Item Name

Item Name | Sesame ▾ |

Show

2. Click on the "**show**" button.

3. The system displays the price of Sesame in different market places

No	Zone	Woreda	Market Place	Item Category	Item Name	Available	Sold	Avg Price	Difference	Market Date
1	Assosa	Assosa	Assosa	Oil Products	Sesame	35	35	2600	--1610	04/12/2014
2	Assosa	Sherkole	Sherkole	Oil Products	Sesame	200	1200	3900	+3779	24/11/2014
3	Assosa	Kurmuk	Horezab	Oil Products	Sesame	200	1200	2890	--2000	05/12/2014
4	Assosa	Bambasi	Bambasi	Oil Products	Sesame	100	80	1600	+100	26/11/2014
5	Assosa	Mao Komo	Tongo	Oil Products	Sesame	0	0	2540	+2540	05/12/2014
6	Kamashi	Belo	Soge	Oil Products	Sesame	0	0	2450	+2450	05/12/2014
7	Kamashi	Yaso	Chigisha	Oil Products	Sesame	21	1200	2963	+2842	04/12/2014
8	Kamashi	Kamashi	Kemashi	Oil Products	Sesame	300	200	2987	+2487	05/12/2014
9	Kamashi	Sedal	Diza	Oil Products	Sesame	500	500	2400	+2279	25/11/2014
10	Metekel	Wonbera	D/Zayit	Oil Products	Sesame	21	1200	3015	--900	05/12/2014
11	Metekel	Bulen	Bulen	Oil Products	Sesame	200	1200	3240	--2000	05/12/2014
12	Metekel	Pawi	Almu	Oil Products	Sesame	21	1200	2879	--3361	04/12/2014
13	Metekel	Dangur	Gublak	Oil Products	Sesame	200	200	3000	--2200	25/11/2014
14	Metekel	Bulen	Baruda	Oil Products	Sesame	150	100	3000	--300	26/11/2014
15	Assosa	Oda	Oda	Oil Products	Sesame	509.5	509.5	2350	-0	04/12/2014
16	Assosa	Homosha	Homosha	Oil Products	Sesame	15	15	2700	-0	04/12/2014

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4. How to use the Smart phone application subsystem to Update or Collect Market Information

❖ Basically the smart phone application is used to collect market information in remote areas where there is limited internet and computer network infrastructure.

❖ In addition to updating the price by fill the app forms and sends it to directly to the system database directly without any delay it is also simplify the usability of SMS and IVR. The following screen shoot shows the first page of the android app which is installed on the smart phone's of the data collectors in each woredas
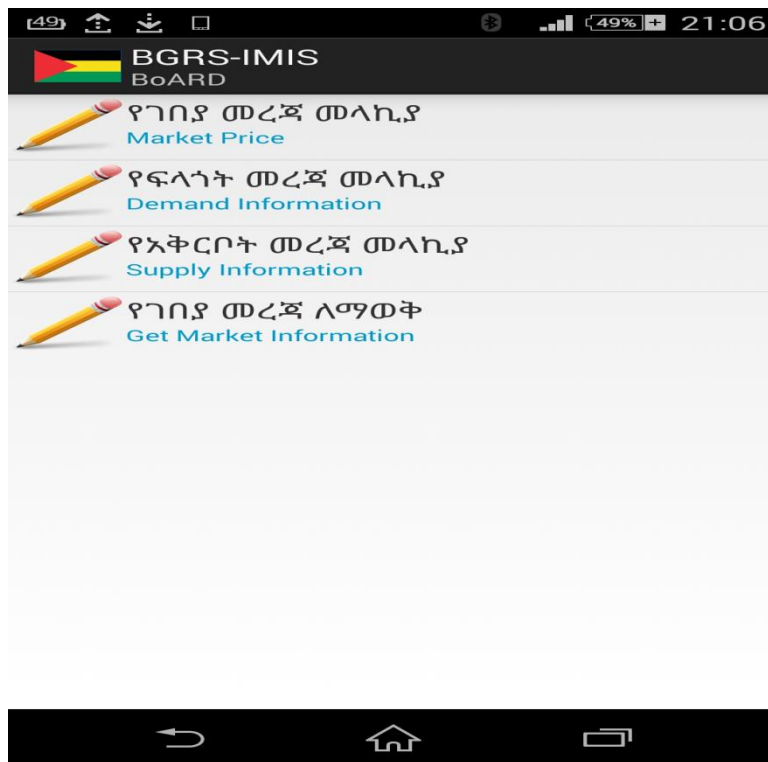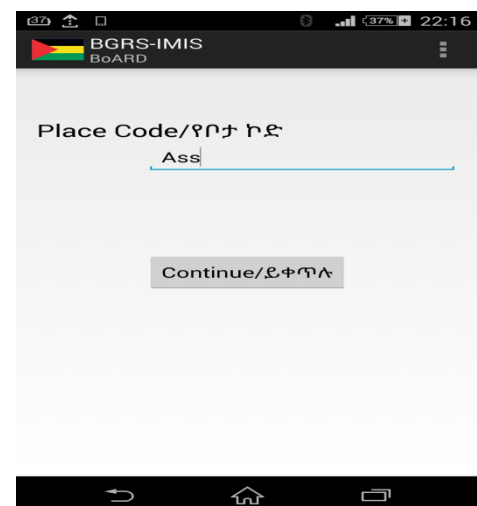

Steps:

1. The data collector installs this app on their android smart phone
2. After they installed it open the app by clicking the "***BGRS-IAMIS"*** which is the name of the app developed for integrated market information system.
3. Then the screen shoot shown above will be displayed
4. The encoder enters the four digit code in to the "***Enter your Code***" field for authentication purpose.

> *Note:* if the encoder forget his/her four digit code, he/she can the password by sending a forget password request just by clicking the "*Forgot Password*" button.

5. Then press login button

6. The Screen Shoot shown below will be opened

7. If the data encoders select the "*market price*" option to update the weekly Price using his/her smart phone application

8. The following screen will be displayed

9. The encoder will fill the pace code (i.e. for the screen shoot shown "*Ass*" is the place code for Assosa Market place)

10. After filled the place code the encoder will press the "*Continue*" button

11. Then the following form will displayed and filled by the encoder

12. After filled the form the encoder will press the "$Send$" Button to update/send/store the data to the database.

13. If he/she wants to send Item price information to the database under the selected market place, just by click on the **"New"** button and will displayed a new blank form and fill it with the required information and repeat step 12 above.